

CLAIMS

What is claimed is:

1. A security system for providing a security service for monitoring a security status of at least one of a mobile asset and a fixed asset globally to detect
5 and respond to a security threat, comprising:

an agent connected with a corresponding one of the at least one of the mobile asset and the fixed asset, said agent comprising:

10 a sensing device for monitoring at least one of a physical security and an environmental security of the at least one of the mobile asset and the fixed asset;

a processor for compiling said at least one of said physical security and the environmental security to generate said security status; and

a transceiver for transmitting a data from and receiving data to the agent;

15 a computer system in communication with said agent for receiving said security status of said at least one of the mobile asset and the fixed asset;

a database for storing the received security status;

a threat detection analysis software for analyzing the security status to detect the security threat;

20 a process for determining a response to the detected security threat based on a type of security threat detected;

an output for performing the response in accordance with the process; and

a method for billing the customer for the security service.

25 2. The security system of claim 1 further comprising a master control unit in communication with the agent for collecting the security status and retransmitting the security status to the computer system.

3. The security system of claim 2 wherein the at least one of a mobile asset and a fixed asset is a mobile asset, the security system further comprising:

30 a loading master control unit for inventorying a cargo loaded into the mobile asset to generate a manifest; and

a communication channel for uploading the manifest to at least one of the

agent, the master control unit and the computer system.

4. The security system of claim 1 wherein said agent includes at least one of a position guidance system and a receiver for receiving a position data, wherein the security status includes the position data.

5 5. The security system of claim 1 wherein the computer system comprises:

a master control unit in communication with the agent; and

10 a server located at a global operations center in communication with the master control unit for sending and receiving data to and from the master control unit.

6. A security system as in claim 1 wherein said sensing device comprises an environmental sensor for monitoring an ambient air within the at least one of the mobile asset and the fixed asset to detect the security threat.

15 7. A security system as in claim 1 wherein said sensing device comprises a chemical detector for detecting a chemical matter.

8. A security system as in claim 1 wherein said sensing device comprises a biological detector for detecting a biological matter.

9. A security system as in claim 1 wherein said sensing device comprises a radiation detector for detecting a radioactive material.

20 10. A security system as in claim 1 wherein said sensing device comprises a door position-sensing device for sensing an opening of at least one of a mobile asset door and a fixed asset door.

25 11. A security system as in claim 1 wherein said sensing device comprises a light-sensing device within at least one of the mobile asset and the fixed asset for sensing a luminescence level therein.

12. A security system as in claim 1 wherein said agent further comprises a video recording device for recording at least one of an interior of the at least one of the mobile asset and the fixed asset or an exterior area surrounding the at least one of the mobile asset and the fixed asset.

30 13. A method for providing a security service for monitoring a security status of an asset, the method comprising:

providing a computer system in wireless communication with an agent having a sensor for sensing at least one of a physical security and an environmental security of the asset, the agent connected with the asset;

5 said agent, processing a security data from said sensor to generate the security status;

said agent, wirelessly transmitting the security status;

said computer system:

wirelessly receiving said security status from said agent;

analyzing said received security status to detect a security threat;

10 following a security process to respond to said detected security threat;

generating a report from said received security status; and

billing a customer for said security service.

15 14. The method of claim 13 wherein providing a computer system comprises:

providing a first server connected with a master control unit for receiving said security status from said agent;

providing a second server at a global operation center; and

said first server, retransmitting said security status to said second server.

20 15. The method of claim 13 wherein receiving a security status comprises:

receiving a notification from said agent connected with said asset when said agent is initialized; and

said agent transmitting said security status to said computer system.

25 16. The method of claim 13 wherein receiving a security status comprises:

receiving a ciphertext from said agent; and

decrypting said ciphertext to generate a plaintext security status.

30 17. The method of claim 13 wherein receiving said security status comprises receiving the security status at intervals.

18. The method of claim 13 wherein receiving the security status

comprises receiving a digital image corresponding to at least one of an area surrounding the asset and an interior of the asset.

19. The method of claim 13 wherein receiving the security status comprises:

5 receiving environmental data indicative of an environment within the asset to detect an environmental threat therein; and

receiving physical condition data indicative of a physical condition of the asset to detect a tampering therewith.

20. The method of claim 19 wherein receiving environmental data
10 comprises receiving chemical data indicative of a chemical matter within the asset for detecting a chemical threat therein.

21. The method of claim 19 wherein receiving environmental data comprises receiving biological matter data indicative of a biological matter within the asset to detect a biological threat therein.

15 22. The method of claim 19 wherein receiving environmental data comprises receiving explosive material data indicative of explosive material within the asset when an explosive material is detected.

23. The method of claim 19 wherein monitoring an environment comprises receiving nuclear radiation data indicative of a radiation within the asset
20 for detecting a radiation threat therein.

24. The method of claim 23 further comprising analyzing the nuclear radiation data to confirm the radiation threat.

25. The method of claim 19 wherein receiving physical condition data comprises receiving door position data indicative of an opening of a door connected
25 with the asset to detect a tampering therewith.

26. The method of claim 13 wherein following a security process comprises:

receiving the security process from a customer;

determining a type of threat detected; and

30 generating an output corresponding to said customer security process for the type of threat detected.

27. The method of claim 26 wherein generating an output comprises controlling an operation of a door connected with the asset in accordance with the security process.

28. The method of claim 26 wherein generating an output comprises
5 controlling an operation of a ventilation system in accordance with the security process.

29. The method of claim 26 wherein generating an output comprises controlling an operation of a lighting system in accordance with the security process.

10 30. The method of claim 26 wherein generating an output comprises initiating a counter measure in accordance with the security process.

31. The method of claim 26 wherein generating an output comprises notifying at least one of an appropriate official and an appropriate agency in accordance with the security process.

15 32. The method of claim 13 wherein generating a report comprises:
receiving the security status at intervals;
storing the received security status; and
generating a report from the stored security status.

33. The method of claim 32 wherein billing a customer comprises:
20 counting a number of reports generated during an interval;
if the number of reports generated exceeds a threshold, generating an invoice for the number of reports generated over the threshold; and
sending the bill to the customer.

34. The method of claim 13 further comprising:
25 leasing a plurality of the agents to a customer for a fee, wherein the lease includes a set number of reports generated for the customer at intervals; and
generating a bill including the lease fee and a report fee for reports generated in excess of a predetermined number of status reports.

35. The method of claim 34 wherein generating a bill comprises:
30 determining a number of agents leased;
determining a number of days each one of the plurality of agents has been

activated; and

generating a bill at a daily lease rate for each one of the plurality of agents leased.

36. The method of claim 35 wherein generating a bill further comprises
5 including a daily monitoring fee for each day the plurality of agents is activated.

37. The method of claim 13 further comprising:
selling a plurality of agents to the customer;
determining a number of days the plurality of agents has been activated; and
generating a bill including a monitoring rate for the plurality of agents
10 activated.

38. The method of claim 13 further comprising:
sending a request for an updated security status to the agent; and
in response to sending the request for the updated security status, receiving
the updated security status from the agent.

39. The method of claim 13 wherein said asset is a fixed asset, the
15 method further comprising:

providing a communication between an existing security device connected
with said fixed asset and said computer system; and
said computer system, receiving a signal when said existing security device
20 detects a threat.

40. The method of claim 39 further comprising:
receiving a security status from a plurality of the agents; and
each one of the plurality of agents, monitoring a security status of an area
within the fixed asset.

41. The method of claim 13 wherein providing a computer system
25 comprises:

providing a master control unit in communication with the agent for receiving
the security status from the agent; and

providing a server at a global operations center for receiving the security
30 status retransmitted from the master control unit.

42. The method of claim 41 wherein said asset is a mobile asset being

transported over a predetermined route on a predetermined schedule from a loading dock to a designated distribution center, wherein the predetermined route includes transport between an origination port and a destination port, the method further comprising:

5 a loading master control, inventorying a cargo loaded into said mobile asset to generate a manifest;

 said agent, receiving a manifest indicative of the cargo loaded into the mobile asset; and

 transmitting the manifest to at least one of the master control unit and the
10 global operations center.

 43. The method of claim 42 further comprising:

 receiving position data from the agent connected with the mobile asset; and

 comparing the position data with predetermined route data to detect a deviation in at least one of the predetermined route and schedule.

15 44. The method of claim 13 further comprising staffing the global operations center with at least one subject matter expert to confirm the detected security threat.

 45. The method of claim 13 further comprising interrogating the agent to determine a security status of the asset.

20 46. The method of claim 13 further comprising:

 receiving a security process from a client;

 storing the security process at the at least one server; and

 following the stored security process in response to the detected security threat.

25 47. The method of claim 13 further comprising providing an access to the security status to a third party for use in generating reports.

 48. The method of claim 13 further comprising providing an Internet access for the customer to access the security status corresponding to the asset monitored for the customer.

30 49. An automated method for monitoring a security status of a plurality of assets, the method comprising:

providing a plurality of agents to a customer, each one of the plurality of agents connected with an asset for monitoring a security of the asset to generate a security status;

providing a server in communication with the plurality of agents;

5 the server receiving a security status from the plurality of agents;

analyzing the received security status to detect a security threat to the asset with which a corresponding one of the plurality of agents is connected;

generating an output in response to the detected security threat in accordance with a process;

10 compiling the received security status at the server;

generating a report from the compiled security; and

transmitting the report to the customer.

50. The method of claim 49 wherein providing a plurality of agents to a customer comprises leasing the plurality of agents to the customer.

15 51. The method of claim 50 further comprising:

calculating a lease fee as a product of the number of agents leased times a lease fee for a period of time leased;

calculating a total bill including the lease fee and a service fee for the period of time; and

20 transmitting the total bill to the customer.

52. The method of claim 50 wherein the asset is a fixed asset including an existing security device connected with the asset and in communication with the server, the method further comprising:

receiving a threat detection signal from the existing security system; and

25 responding to the detected threat in accordance with the process.